cells multiply faster and live longer in petri dishes than adult stem cells.

Cloned embryo cells and normal embryo cells provide the same cellular tissue for research purposes. However, Mr. Speaker, these embryonic stem cells have failed in many clinical tests because they multiply too rapidly, causing cysts and cancers. Adult stem cells are the other area of stem cell research, which is much less controversial and which has been successful in over 45 trials. In fact, adult stem cells have been utilized to treat multiple sclerosis, bone marrow disorders, leukemias, anemias, and cartilage defects and immuno-deficiency in children.

Adult stem cells have been extracted from bone marrow, blood, skeletal muscle, the gastro-intestinal tract, the placenta, and brain tissue, to form bone marrow, bone, cartilage, tendon, muscle, fat, liver, brain, nerve, blood, heart, skeletal muscle, smooth muscle, esophagus, stomach, small intestine, esophagus, stomach, small intestine, but it prohibits the production of cloned embryos. It is a cloning bill; it is not a stem cell research bill.

Furthermore, H.R. 2505 allows for cloning research on various molecules, DNA, cells from other human embryos, tissues, organs, plants, animals or animals other than humans. In fact, it allows for cloning research on RNA, ribonucleic acid, which has been used in genetic therapy.

Fourth, the substitute prohibits States from adopting laws that prohibit or more strictly regulate cloning within their borders. It is a Federal preemption. This portion of the substitute raises even more ethical concerns which speak for themselves. Try telling my constituents they cannot ban human cloning, and I will tell you they disagree.

Finally, Mr. Speaker, the substitute contains a 10-year sunset provision. If this were to be enacted, Congress would have to go through this debate once again before the sunset occurs. The ethical and moral objections to human cloning will not change 10 years from now. However, the proponents of human cloning will continue to fight for their right to produce human clones in America; and authorizing a subsequent ban on human cloning could become even more controversial.

This is why Members on both sides of the aisle should rise in opposition to the substitute, defeat it, and pass H.R. 2505.

Mr. Speaker, I reserve the balance of my time.

Mr. GREENWOOD. Mr. Speaker, I yield 5 minutes to the distinguished and scholarly gentleman from California (Mr. HORN).

Mr. HORN. Mr. Speaker, I thank the gentleman for yielding me time.

First I ask everyone to take a deep breath and step back for a moment.

The House of Representatives is debating a bill that prohibits human cloning. I agree that cloning human beings is ethically unacceptable. In fact, I think just about everyone will reach this conclusion, which leads me to question whether we actually need to legislate something that is so common sense.

Now, let me ask people to imagine the conditions under which Jonas Salk developed a vaccine to prevent polio. Presumably, Dr. Salk spent many hours in his research laboratory, growing tissue cultures, and implanting within those cultures foreign agents to stimulate and ultimately prevent polio. How many of us then questioned the scientific techniques being used by Dr. Salk, and thousands of other researchers since then to discover new medicines and treatments for debilitating illnesses that plague our society? Can anyone actually say that the polio vaccine is bad because it was developed using tissue samples?

The problems with the discussions surrounding the human cloning bill advanced by the gentleman from Florida (Mr. WELDON) and the gentleman from Michigan (Mr. STUPAK) are two-fold. First, it cloaks a worthwhile and necessary debate in grossly overblown rhetoric; and, second, it is such a broad-brush effort that it would absolutely prohibit potentially life-saving therapies that may prevent and cure diseases such as Alzheimer's, cancer, Lou Gehrig's disease, cardiovascular damage, diabetes, and spinal cord injuries. At 5 o'clock I will be meeting with a group on Hunter's Syndrome. These various diseases could probably very well be researched by NIH and the great universities of this land.

What we are talking about, in short, is watching cells divide in a petri dish. Could this group of cells develop into a human embryo? Maybe, but only if implanted in a womb, and then its development is questionable.

The Greenwood bill permits the technology, but ensures that the group of cells never develops into anything remotely resembling a human being.

So, let me ask, is this cell group really any different from the tissue cultures grown by Dr. Salk? Is this group of cells so special that they deserve all of the moral, ethical, and legal protections that we afford fully developed, fully functional, and fully cognitive emotive human beings?

Is this group of cells so different and so much more important from the frozen fertilized eggs that we are considering using for stem cell research that they deserve more proscriptive treatment? Why are we less concerned about the sanctity of life with eggs that were harvested and fertilized for purposes of creating a human life than in the situation where we have neither of these purposes?

Although I am not convinced that the Greenwood substitute is a perfect alternative, it is certainly a superior alternative to an approach that would stop any sort of life-affirming therapies to advance. I think what has all of us ill at ease is that this technology

immediately conjures up images of Dr. Frankenstein or the chemist fiddling with his or her chemistry set creating solutions and potions of unknown characteristics.

I am not a biological scientist myself. I have been a Dean of Graduate Studies and Research. I do know what goes on in universities, and in this Nation we have a great number of laboratories, and this government has helped fund bright young people. We need to encourage them and not limit them.

Honestly, I cannot say I remember much from my own school biology class, and I think a lot of us are in the same way. We were dealing with leaves and not molecular objects. Like most people, I find these images to be disconcerting. But I want to live in a world in which science can be allowed to proceed to find a cure for polio, for Alzheimer's, for any host of tragic diseases, and that treatments might be possible for any of them. We can only do this by letting the science move forward. The Greenwood alternative permits this; Weldon does not.

□ 1630

Ultimately, the debate and science are too complicated to leave to a group of unsophisticated legislators with instruments too blunt to be effective. I am concerned that the House leadership has allowed this debate to proceed in this hasty, reckless fashion.

For this reason alone, we should be the first to follow the Hippocratic Oath: First, do no harm. That means, oppose the Weldon bill.

Mr. SENSENBRENNER. Mr. Speaker, I yield myself 1 minute.

With all due respect to my friend, the gentleman from California (Mr. HORN), I do not think the gentleman has read the bill and I do not think he has been listening to the debate.

This bill does not stop scientific research. This bill does not stop stem cell research. This bill stops research in destruction of cloned embryonic stem cells, no other stem cells whatsoever.

I do not think Dr. Salk used cloned material when he developed the polio vaccine. Nobody even thought of cloning 45, 50 years ago when Dr. Salk was using his research.

Please, let us talk about what is in the bill and what is in the Greenwood substitute, rather than bringing up issues that are completely irrelevant to both.

Mr. Speaker, I yield 4 minutes to the gentleman from Michigan (Mr. STU-PAK), the coauthor of the bill.

Mr. STUPAK. Mr. Speaker, I thank the gentleman for yielding time.

I rise today in strong support of the Weldon-Stupak Human Cloning Prohibition Act of 2001, and I would like to thank the gentleman from Florida (Mr. WELDON) for his leadership on this issue.

We are in the midst of a tremendous new debate, a tremendous new policy direction, a tremendous new revolution. We cannot afford to treat the